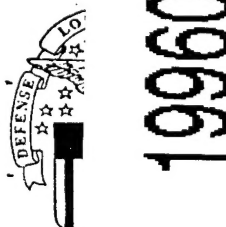# Technical Publication Transfer

Using:

Northrop Corporation's Data

MIL-D-028000A (IGES)
MIL-M-28001A (SGML)
MIL-R-28002A (Raster)
MIL-D-28003 (CGM)

Quick Short Test Report

17 May 1993

19960822 048

Prepared for

Electronic Systems Center

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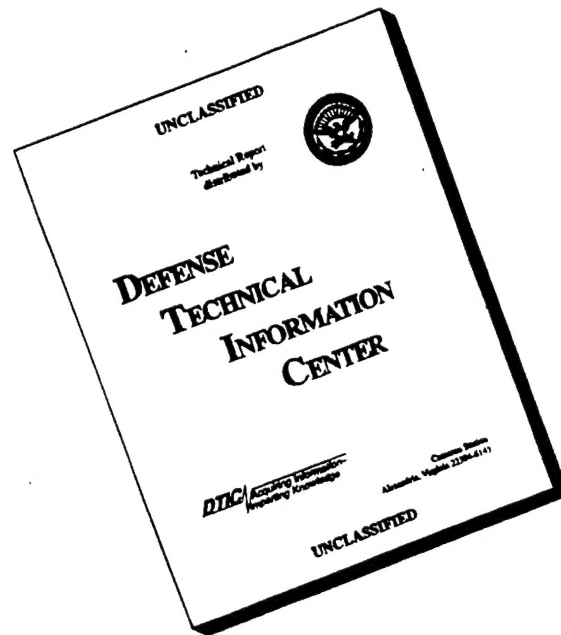
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Technical Publication Transfer

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Contents

1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-Cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1840A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of the informal test, reported in this QSTR, was
to analyze Northrop Corporation's interpretation and use of
the CALS standards, in transferring technical publication
data.   Northrop used its CALS Technical Data Interchange
System to produce data, in accordance with the standards,
and delivered it to the AFCTN technical staff on two 9-track
magnetic tapes.   The tapes were the same except for the re-
cording density, one was at 1600 bpi and the second at 6250
bpi.

2. Test Parameters

Test Plan: AFCTB 93-049

Date of Evaluation: 17 May 1993

Evaluator:

George Elwood
Air Force CALS Test Bed
DET 2 HQ ESC/AV-2P
4027 Colonel Glenn Hwy
Suite 300
Dayton OH 45431-1672

Data Originator:

John P. Kent
Northrop Corporation
B-2 Division
M/S L591/UB
8900 East Washington Blvd
Pico Rivera CA 90660
(310) 948-0624

Data Description:

Technical Manual Test (2x)
     1 Document Declaration file
     1 Document Type Definition (DTD)
     4 Initial Graphics Exchange Specification
            (IGES) files
     1 Text/Standard Generalized Markup Language
            (SGML) file
     1 Raster file
     1 Computer Graphics Metafile (CGM) file

Data Source System:

     1840

       HARDWARE

          Unknown
       SOFTWARE
          Unknown

IGES

HARDWARE

Unknown

SOFTWARE

Unknown

Text/SGML

HARDWARE

Unknown

SOFTWARE

Unknown

Raster

HARDWARE

Unknown

SOFTWARE

Unknown

CGM

HARDWARE

Unknown

SOFTWARE

Unknown

Evaluation Tools Used:

MIL-STD-1840A (TAPE)

SUN 3/280

AFCTN *Tapetool v1.2.9 UNIX*
XSoft *CAPS/CALS v40.4*
Texas Instruments (TI) *Tapetool v1.0.1*

PC 486/50

AFCTN *Tapetool v1.2.9 DOS*

MIL-D-28000 (IGES)

Sun SparcStation 2

ArborText *iges2draw*
IGES Data Analysis (IDA) *Parser/Verifier v92*
IDA *IGESView v3.05*
International TechneGroup Incorporated
(ITI) *IGES/Works v1.3*
Rosetta Technologies *Preview v3.2*

PC 486/50

    AUTODESK *AutoCAD 386 R12*
    AUTODESK *AutoCAD 386 R11*
    AUTODESK Micro Engineering Solutions
        (MES) *CheckMark v1.0*
    Cadkey *Cadkey v5.02*
    Cadkey *Cadkey v4.06*
    IDA *IGES Parser/Verifier v92*
    IDA *IGESView Windows*
    Wiz Worx *IGESDRAW*

MIL-M-28001 (SGML)

SUN SparcStation 2

    ArborText *ADEPT v4.2.1*

PC 486/50

    Exoterica *XGMLNormalizer v1.2e3.2*
    Exoterica *Validator v2.0 EXL*
    McAfee & McAdam *Sema Mark-it v2.3*
    Public Domain *sgmls*

MIL-R-28002 (Raster)

SUN SparcStation 2

    ArborText *g42tiff*
    AFCTN *validg4*
    AFCTN *calstb.475*
    IDA *IGESView v3.0*
    Island Graphics *IslandPaint v3.0*

PC 486/50

    AFCTN *validg4*
    IDA *IGESView Windows*
    Inset Systems *HiJaak v2.1*
    Inset Systems *HiJaak Window v1.0*
    Software Publishing Corporation
        (SPC) *Harvard Graphics v3.0*
    Corel *Ventura Publisher*

MIL-D-28003 (CGM)

SUN SparcStation 2

    ArborText *cgm2draw*
    Island Graphics *IslandDraw v3.0*

PC 486/50

    Advance Technology Center
        (ATC) *MetaVIEW R 1.12*
    ATC *MetaCheck R 2.05*
    SPC *Harvard Graphics v3.05*
    Inset Systems *HiJaak v2.1*
    Inset Systems *HiJaak v1.0 Windows*

Micrografx *Designer v3.1*
Corel *Ventura Publisher*

**Standards
Tested:**

MIL-STD-1840A
MIL-D-28000A
MIL-M-28001A
MIL-R-28002A
MIL-D-28003

3. 1840A Analysis

3.1 External Packaging

The tapes arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with a magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tapes were enclosed in a barrier bag as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reels showed the labels indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the boxes were packing lists showing all files recorded on the tapes.

3.2 Transmission Envelope

The 9-track tapes received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

3.2.1 Tape Formats

The tapes were run through the AFCTN *Tapetool v1.2.9* utility. No errors were encountered while evaluating the contents of the tape labels on either tape.

The tapes were read using XSoft's *CAPS read1840A* utility without any reported errors.

The tapes were read using TI's *Tapetool v1.0.1* without a reported error.

The physical structure of both tapes meets the CALS MIL-STD-1840A requirements.

3.2.2 Declaration and Header Fields

No errors were reported in the Document Declaration file and data file headers on either tape.

Both tapes meet this portion of the CALS MIL-STD-1840A requirements.

4. IGES Analysis

The tapes contained four IGES files each. The files of both tapes were compared and found to be the same. The files from only one tape were evaluated. These files were evaluated using IDA's *parser* and *verifier* set for CALS MIL-D-28000A Class I specification. No CALS errors were reported during this procedure. However, many basic IGES warnings were issued. The log files from this evaluation are included in the Appendix to this report.

The AFCTB has several tools for viewing IGES files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The files were converted using ArborText's *iges2draw* utility with no reported errors. When resulting files were read into Island Graphics' *IslandDraw* nothing displayed on the screen. The files were converted again using an undocumented function of *iges2draw*. The error in the files was the base locations defined as a negative X and Y coordinate. When the resulting files from the second conversion were read into *IslandDraw* they all displayed correctly.

The files were read using AUTODESK's *AutoCAD R12* with translator version 5.1 without a reported error.

The files were read into MES's *CheckMark* software without a reported error.

The files were converted using Cadkey's *ig2c* utility. The resulting files were read into Cadkey's *Cadkey*, displayed and printed.

The files were read using IDA's *IGESView* and *IGESView for Windows* without a reported error.

The files were read using ITI's *IGESWorks* without a reported error. The files were displayed and printed.

The IGES files were converted using Rosetta Technologies' *Prepare* without a reported error. The resulting files were read into Rosetta Technologies' *Preview*, displayed and printed.

The files were read into the Wiz Worx *IGESDRAW* utility without a reported error.

The IGES files meet the CALS MIL-D-28000A specification.

5. SGML Analysis

The AFCTB has several parsers available for evaluating submitted DTD and Text files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. These products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings unless specified in the report. Changes to DTD or Text files required by each system are not documented in the report.

The SGML files from both tapes were compared and found to be exact duplicates. The files from only one tape were evaluated.

The Text and DTD files from this document were evaluated using Exoterica's *Validator* parser with no reported errors although four warnings were issued. These warnings were the same as the ones issued by the ArborText parser.

The Text and DTD files from this document were tested using Exoterica's *XGMLNormalizer* parser with no reported errors.

The Text and DTD files from the tape were evaluated using McAfee & McAdam's *Sema Mark-it* parser with no reported errors.

The Text and DTD files from the tape were evaluated using the Public Domain *sgmls* parser with no reported errors.

An attempt was made to import the files into ArborText's *Adept* software. When parsing the DTD, three warnings were generated which prevented the files from parsing. The errors relate to the tags "ENTRY", "NOTICE", and "RESULT". When the FOSI was parsed multiple errors were reported. Because of the number of errors, no further effort was made to correct them.

The DTD and Text files parsed successfully on all but one of the software tools available in the AFCTB. The Output Specification was not evaluated. The SGML part of the tapes meet the CALS MIL-M-28001A specification.

6. Raster Analysis

The tapes contained one Raster file each. These files were compared and found to be exact duplicates and only one file was evaluated. This file was evaluated using the AFCTN *validg4* utility. This program reported that the file meets the CALS MIL-R-28002A specification.

The file was read into the AFCTN *calstb.475* viewing utility. No problems were noted.

The AFCTB has several tools for viewing Raster files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings. Even though all images may have been printed, a sample of the images are included in the Appendix to this report unless there are significant differences between outputs.

The file was converted using ArborText's *g42tiff* utility without a reported error. The resulting file was read into Island Graphics' *IslandPaint*, displayed and printed.

The file was read into IDA's *IGESView* and *IGESView for Windows* without a reported error.

The file was read into Inset Systems' *HiJaak for Windows* without a reported error.

The file was converted using Inset Systems' *HiJaak for DOS* into an IMG format without a reported error. The resulting file was read into Corel's *Ventura Publisher*, displayed and printed.

The Raster file was converted using Rosetta Technologies' *Prepare* without a reported error. The resulting file was read into Rosetta Technologies' *Preview*, displayed and printed.

The Raster files meet the CALS MIL-R-28002A specification.

7. CGM Analysis

The tapes contained one CGM file each. These files were compared and found to be exact duplicates so only one file was evaluated. This file was evaluated using ATC's *Meta-Check* with CALS options. This utility reported that the file meets the CALS MIL-D-28003 specification.

The CGM file was evaluated using the beta AFCTN *validcgm* utility. This utility reported several errors.

The AFCTB has several tools for viewing CGM files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor and indication of CALS capability. All operations were performed using the default settings.

The CGM file was converted using ArborText's *cgm2draw* utility without a reported error. The resulting file was read into Island Graphics' *IslandDraw*, displayed and

printed. With the exception of the dark background, the printed image was acceptable for insertion into a publication. When the background was removed, the white text disappeared on the white background.

The file was viewed using ATC's *MetaView* software with a reported error relating to fonts.

The file was read into Inset Systems' *HiJaak for Windows*, but nothing was displayed on the screen and no error messages were displayed.

The file was imported directly into Island Graphics' *IslandDraw* without a reported error, however, the resulting image was displayed along the top of the screen as a series of lines.

The file was imported into the Micrografx *Designer* without a reported error, however, nothing displayed on the screen.

According to Michael Harrison of Micrografx, "Micrografx is aware of the problems associated with reading these files and is working on a solution to be implemented in a future release of our products."

The file was imported into SPC's *Harvard Graphics v3.05* with two reported errors. The first was "line style errors" and the second was "165 non CGM entities not translated". The resulting image was not usable. The background color had to be changed in order to see the text.

The file was imported into Corel's *Ventura Publisher* but an error message, indicating an incorrect file type, was displayed and nothing imported.

The CGM files were reported as meeting the CALS MIL-D-28003 specification. However, all but one of the CGM tools available in the AFCTB failed to display a usable image.

8. Conclusions and Recommendations

The physical structure of the tapes from Northrop Corporation were correct. No errors were reported by any of the tape reading utilities available in the AFCTB on either tape. The CALS Document Declaration file and data file headers were also reported without error. This portion of the tapes meet the CALS MIL-STD-1840A requirements.

The IGES files on the tapes were reported without CALS errors although basic IGES warnings were noted during the evaluation. The IGES files meet the CALS MIL-D-28000A specification.

The Text and DTD files meet the CALS MIL-M-28001A specification.

The Raster files meet the CALS MIL-R-28002A specification.

The CGM files were reported as meeting the CALS MIL-D-28003 specification.

The tapes from Northrop Corporation meet the CALS MIL-STD-1840A requirements.

9. Appendix A - Tapetool Report Logs

9.1 Tape Catalog

Air Force CALS Test Network Catalog Evaluation - Version 1.2; Release 9 (0)

  Standards referenced:
    MIL-STD-1840A (1987) - Automated Interchange of Technical Information
    ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes
                    for Information Interchange
    ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Mon May 17 09:26:15 1993

MIL-STD-1840A File Catalog

File Set Directory: C:\CTN129\OVERLAND\SET008

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00260	02048/000001	Extracted
D001T001	TEXT	D/00260	02048/000009	Extracted
D001G002	DTD	D/00260	02048/000010	Extracted
D001H003	Output Specification	D/00260	02048/000072	Extracted
D001Q004	IGES	F/00080	02000/000281	Extracted
D001Q005	IGES	F/00080	02000/000138	Extracted
D001Q006	IGES	F/00080	02000/000224	Extracted
D001Q007	IGES	F/00080	02000/000224	Extracted
D001C008	CGM	F/00080	00800/000062	Extracted
D001R009	Raster	F/00128	02048/000017	Extracted

Catalog Process terminated normally.

9.2   Tape Evaluation Log

Air Force CALS Test Network Tape Evaluation - Version 1.2; Release 9 (O)
   Standards referenced:
      ANSI X3.27 (1987) - File Structure and Labeling of Magnetic Tapes
                          for Information Interchange
      ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Mon May 17 09:25:18 1993

ANSI Tape Import Log

Rewinding tape to load point...

VOL1ITDS01   CONTROLLER   4

   Label Identifier: VOL1
   Volume Identifier: ITDS01
   Volume Accessibility:
   Owner Identifier:
   Label Standard Version: 4

HDR1D001   ITDS0100010001000100 93127 93127 000000   CONTROLLER

   Label Identifier: HDR1
   File Identifier: D001
   File Set Identifier: ITDS01
   File Section Number: 0001
   File Sequence Number: 0001
   Generation Number: 0001
   Generation Version Number: 00
   Creation Date: 93127
   Expiration Date: 93127
   File Accessibility:
   Block Count: 000000
   Implementation Identifier: CONTROLLER

HDR2D0204800260   00

   Label Identifier: HDR2
   Recording Format: D
   Block Length: 02048
   Record Length: 00260
   Offset Length: 00

************ Tape Mark ***************

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 1.

*********** Tape Mark ***************

EOF1D001   ITDS0100010001000100 93127 93127 000001   CONTROLLER

  Label Identifier: EOF1
  File Identifier: D001
  File Set Identifier: ITDS01
  File Section Number: 0001
  File Sequence Number: 0001
  Generation Number: 0001
  Generation Version Number: 00
  Creation Date: 93127
  Expiration Date: 93127
  File Accessibility:
  Block Count: 000001
  Implementation Identifier: CONTROLLER

EOF2D0204800260   00

  Label Identifier: EOF2
  Recording Format: D
  Block Length: 02048
  Record Length: 00260
  Offset Length: 00

*********** Tape Mark ***************

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*********** Tape Mark ***************

############ End of Volume ITDS01 #############

############ End Of Tape File Set #############

Rewinding tape to load point...

Tape Import Process terminated normally.

9.3 Tape File Set Validation Log

Air Force CALS Test Network File Set Evaluation - Version 1.2; Release 9 (O)

```
  Standards referenced:
    MIL-STD-1840A (1987) - Automated Interchange of Technical Information
```

Mon May 17 09:26:16 1993

MIL-STD-1840A File Set Evaluation Log

File Set: SET008

Found file: D001
Extracting Document Declaration Header Records...
Evaluating Document Declaration Header Records...

srcsys: John P. Kent, ITDS Chief Engineer, Northrop Corporation, B-2 Division, L591/GK
E. Washington Blvd., Pico Rivera, CA 90660-3765 (310) 948-0624
srcdocid: 1B-2A-2-21JG-10-1
srcrelid: NONE
chglvl: ORIGINAL
dteisu: 19910301
dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT,
TechneCenter, 4027 Col. Glenn Highway, Dayton, OH 45431-1601
dstdocid: 1B-2A-2-21JG-10-1
dstrelid: NONE
dtetrn: 19930507
dlvacc: NONE
filcnt: T1, H1, G1, C1, Q4, R1
ttlcls: UNCLASSIFIED
doccls: UNCLASSIFIED
doctyp: JOB GUIDE
docttl: ENVIRONMENTAL CONTROL - ECS CONTROL

Found file: D001T001
Extracting Text Header Records...
Evaluating Text Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
doccls: UNCLASSIFIED
notes: NONE

Saving Text Header File: D001T001.HDR

Saving Text Data File: D001T001.TXT

Found file: D001G002
Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
notes: NONE

Saving DTD Header File: D001G002.HDR
Saving DTD Data File: D001G002.DTD

Found file: D001H003
Extracting Output Specification Header Records...
Evaluating Output Specification Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
notes: NONE

Saving Output Specification Header File: D001H003.HDR
Saving Output Specification Data File: D001H003.OS

Found file: D001Q004
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2111-0101A
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q004.HDR
Saving IGES Data File: D001Q004.IGS

<<<<< *PART OF LOG REMOVED HERE* >>>>>

Found file: D001C008
Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1

txtfilid: W
figid: NONE
srcgph: B2AJG2111-0103D
doccls: UNCLASSIFIED
notes: NONE

Saving CGM Header File: D001C008.HDR
Saving CGM Data File: D001C008.CGM

Found file: D001R009
Extracting Raster Header Records...
Evaluating Raster Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2111-0104D
doccls: UNCLASSIFIED
rtype: 1
rorient: 000,270
rpelcnt: 003408,004408
rdensty: 0400
notes: NONE

Saving Raster Header File: D001R009.HDR
Saving Raster Data File: D001R009.GR4

Evaluating numbering scheme...
No errors were encountered during numbering scheme evaluation.
Numbering scheme evaluation complete.

Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

10.   Appendix B - Detailed IGES Analysis

10.1   File D001Q004

10.1.1   Parser/Verifier Log

```
        *** IGES DATA FILE ANALYSIS ***
        ***        MARCH 1992         ***
        ***    IGES Data Analysis     ***
        ***       (708) 449-3430      ***
```

Input file is /novell/9349/d001q004.igs

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is May 17, 1993   1:17 PM

*** File and Product Name Information ***

```
   File name from sender   = '0101A.gef.igs'
   File creation Date.Time  = '930218.130008'
   Model change Date.Time   = ''
   Author                   = 'NORTHROP B2 ITDS CTB'
   Department               = ''
   Product name from sender = '0101A.gef.igs'
   Destination product name = '0101A.gef.igs'
```

*** Parameter Delimiters ***

```
   Delimiter  = ','
   Terminator = ';'
```

*** Originating System Data ***

```
   System ID             = 'ITDS CONVERTER: GEF_IGES'
   Preprocessor version  = '1.0'
   Specification version = 6 (IGES 4.0)
```

*** Precision levels ***
```
   Integer bits =    32
   Floating point  -  Exponent =    38  Mantissa =     6
   Double precision - Exponent =   308  Mantissa =    15
```

*** Global Model Data ***

```
Model scale              =   1.0000E+00
Unit flag                =   1
Units                    =   'IN'
Line weights             =   1
Maximum line thickness   =   6.300000E-03
Minimum line thickness   =   6.300000E-03
```
CAUTION 2317: Maximum line thickness equal to minimum thickness.
```
Granularity              =   1.000000E-03
Maximum coordinate       =   7.243750E+00
```

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1850
	Blanked	0
Independence:	Independent	1838
	Physically Subordinate	9
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1831
	Annotation	19
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1850
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
104	1	0	659	Conic arc - ellipse
106	63	0	8	Simple closed planar curve
110	0	0	497	Line
112	0	0	5	Parametric spline curve
124	0	0	659	Transformation matrix
212	0	0	9	General note

230	0	0	8	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	1850

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled   1850

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
-	-	166	8	-	42	4	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	493	-	-	455	1	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116	118	120	122	124	125	126	128	
-	-	-	-	659	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted

- - - - - - - - User defined

*** Line Widths Used in Data ***

   Weight   Count   Width

 Defaulted   1850   (0.0063)

*** Colors Used in Data ***

 Defaulted   1784
     Black   57
     White   9

****
****** ENTITY ANALYSIS ******
****

*** Entity type: 104

WARNING 2265: Start point off conic by 1.190300E-03 at D   539.
WARNING 2265: Start point off conic by 1.234213E-03 at D   595.
WARNING 2265: Start point off conic by 1.388423E-03 at D   743.
WARNING 2039: End point off conic by 1.388423E-03 at D   743.

<<<<< PART OF LOG FILE REMOVED HERE >>>>>

WARNING 2265: Messages regarding invalid start point suppressed. WARNING 2039: Message
regarding conic end points suppressed.

 *** Entity type: 106

 *** Entity type: 110

  --   497 lines averaging 2.015512E-01 units --

 *** Entity type: 112

 *** Entity type: 124

659 transformation matrices, 659 non-zero translations.
NOTE   2341: 659 matrices contain translation information.

 *** Entity type: 212

      9 text strings in data file.
      Average text aspect ratio in file is 0.9883842.

Minimum text aspect ratio in file is 0.9821430.
Maximum text aspect ratio in file is 0.9910715.

FONTS USED IN FILE

FONT   COUNT   NAME

1   9   Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D   5 contains 1 views.
Drawing at D   5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D   1 is 1.000000E+00.
Orthographic View entity at D   1 has 0 clipping planes specified.
    XMIN = Not Set   XMAX = Not Set
    YMIN = Not Set   YMAX = Not Set
    ZMIN = Not Set   ZMAX = Not Set

*** Message Summary ***

2015: 98 Mathematically incorrect definitions.
2018: 1 Problems with line weight/width display information.

*** Error Summary ***

    0 fatal errors
    0 severe errors
    0 errors
   98 warnings
    1 cautions
    0 nitpicks
    1 notes

*** End of Analysis of /novell/9349/d001q004.igs ***

10.1.2   Parser Log - AutoCAD R12

```
Title: IGESIN Journal (v5.1 Nov 05 1992)
=============================================================================
File: I:/9349/D001Q004.xli
Date: Mon, May 17, 1993
Time: 16:03:10
=============================================================================

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N:   117-10075750
Translating from IGES file:      I:/9349/D001Q004.IGS
          to AutoCAD Drawing:    I:\9349\D001Q004.dwg


=============================================================================

Options obtained from:  default settings
Curves Approximated to Tolerance of           0.01
Surfaces Approximated to Tolerance of         0.01

Text Font/Style mapping:
IGES Text font        Style Name      ACAD Font
         0               SYMBOL0        iges0
         1               STANDARD         txt
         2                  LEROY         txt
         3                 FUTURA         txt
         6                 COMP80         txt
        12                GOTHICE      gothice
        13                GOTHICI      gothici
        14                 ROMANS       romans
        17                 ROMANT       romant
        18                 ROMAND       romand
        19                    OCR         txt
      1001                SYMBOL1     iges1001
      1002                SYMBOL2     iges1002
      1003                SYMBOL3     iges1003
      2001                  KANJI      bigfont

IGES Linefont/AutoCAD Linetype mapping
IGES Line Font        AutoCAD linetype        Shape file
         0                BYLAYER
         1             CONTINUOUS
         2                 DASHED               acad.lin
         3                PHANTOM               acad.lin
         4                 CENTER               acad.lin
```

5   DOT   acad.lin

==

Parse phase

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 493, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

*** Warning (IEVM_BAD_START_POINT_104) ***
(DE 495, TF 104:1) Entity's start point not on the conic. Value found was
1.2643260e-002, 6.7795300e-003.

Action taken: Start point moved 1.5608861e-003 units, from 1.2643260e-002,
6.7795300e-003 to 1.4204146e-002, 6.7795300e-003.

*** Warning (IEVM_BAD_END_POINT_104) ***
(DE 495, TF 104:1) Entity's End Point not on the conic. Value found was
-1.3838220e-002, 6.3987300e-003.

Action taken: End point moved 1.0075731e-003 units, from -1.3838220e-002,
6.3987300e-003 to -1.4845793e-002, 6.3987300e-003.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 589, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

==
Start Section:

CONFORMANCE:
  MIL-D-28000 Amendment1, 20 December 1988
  Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:
  0101A.gef.igs

Global Section:

Parameter Delimiter: ,
Record Delimiter: ;
Sending Product ID: 0101A.gef.igs

```
File Name:               0101A.gef.igs
System ID:               ITDS CONVERTER: GEF_IGES
Preprocessor Version:    1.0
Size of Integer:         32
Sgl. Precision Mag:      38
Sgl. Precision Sig:      6
Dbl. Precision Mag:      308
Dbl. Precision Sig:      15
Receiving Product ID:    0101A.gef.igs
Model Space Scale:       1.000000
Unit Flag:               1
Unit String:             IN
# of Line Weights:       1
Maximum Line Width:      0.006300
Creation Date:           02/18/93 13:00:08
Minimum Resolution:      0.001000
Maximum Coordinate:      7.243750
Author:                  NORTHROP B2 ITDS CTB
Organization:
IGES Version Number:     6
Drafting Standard:       0
```

Entity Summary:

Type	Form	Description	Count
104	1	Ellipse	659
106	63	Simple Closed Planar Curve	8
110	0	Line	497
112	0	Parametric Spline Curve	5
124	0	Transformation Matrix	659
212	0	General Note (Simple)	9
230	0	Section Area (Standard Fill)	8
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	2
410	0	View	1
		Total	1850

Translation phase

Drawing Entity (404 Form 0) at DE 5, with
   name = ,
   size = 3.937500, 6.300000,
   units = IN,

was processed in the AutoCAD drawing file: I:\9349\D001Q004.dwg

*** Warning (ACAD_NEW_VIEW_VOLUME_GENERATED) ***
(DE: 1 TF: 410:0)
A new view volume has been generated for the view with:
 XMIN (-4.641649), XMAX (0.401133),
 YMIN (0.456990), YMAX (7.663985),
 ZMIN (-0.688634), ZMAX (0.688634).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
104	1	Ellipse	659	659	0
106	63	Simple Closed Planar Curve	9	9	0
110	0	Line	497	497	0
112	0	Parametric Spline Curve	5	5	0
212	0	General Note (Simple)	9	9	0
230	0	Section Area (Standard Fill)	8	8	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	1	1	0
Totals			1190	1190	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	2
Total			2

AutoCAD Entity Summary

Entity	Created	Errors
LINE	953	0
TEXT	9	0
SOLID	7	0
INSERT	1	0
POLYLINE	210	0
BLOCK	1	0
Totals	1181	0

28

```
================================================================================
```
Error Summary:

The following message was issued 659 time(s)
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 658 time(s)
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 610 time(s)
Entity has a column which is not a unit vector.

The following message was issued 1 time(s)
A new view volume has been generated for the view with:
 XMIN (%lf), XMAX (%lf),
 YMIN (%lf), YMAX (%lf),
 ZMIN (%lf), ZMAX (%lf).

Status: 0
Warning: 1928
Error: 0
Fatal: 0

Elapsed Time:

Processor: 00:01:12
Clock: 00:01:12

10.1.3 Output AutoCAD R12

ACCESS PANEL
5336PN048
⟨2111CT001⟩

⟨LEFT⟩

ACCESS PANEL
5336PN058
⟨2111CT002⟩

⟨RIGHT⟩
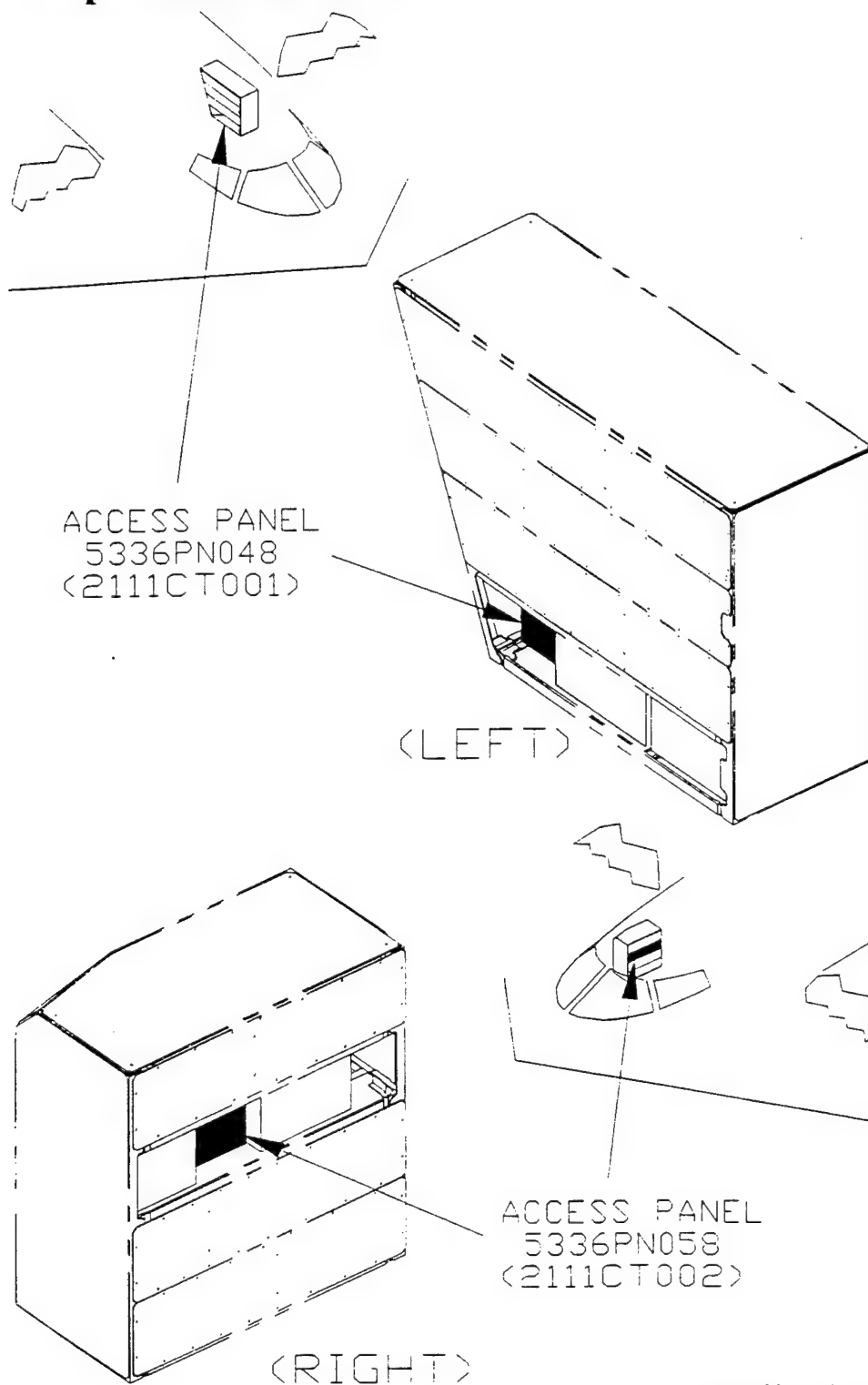
B2AJG2111-0101A

10.1.4 Output IGESView

ACCESS PANEL
5336PN048
(2111CT001)

(LEFT)

ACCESS PANEL
5336PN058
(2111CT002)

(RIGHT)
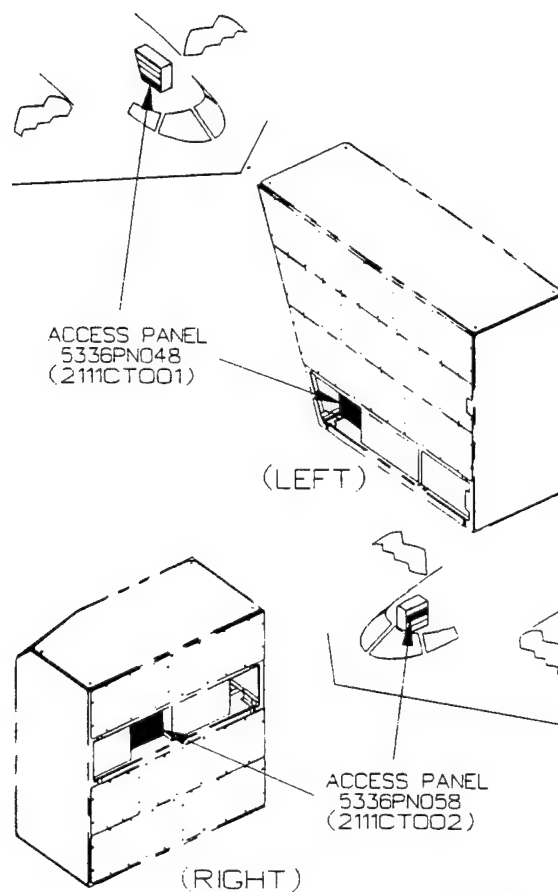
10.2   File D001Q005

10.2.1   Parser/Verifier Log

```
            ***  IGES DATA FILE ANALYSIS  ***
            ***         MARCH 1992         ***
            ***    IGES Data Analysis      ***
            ***       (708) 449-3430       ***

  Input file is /novell/9349/d001q005.igs

  Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

  Today is May 17, 1993  1:19 PM

*** File and Product Name Information ***

   File name from sender    = '0101A.gef.igs'
   File creation Date.Time   = '930218.130511'
   Model change Date.Time   = ''
   Author                   = 'NORTHROP B2 ITDS CTB'
   Department               = ''
   Product name from sender = '0101A.gef.igs'
   Destination product name = '0101A.gef.igs'

*** Parameter Delimiters ***

   Delimiter  = ','
   Terminator = ';'

*** Originating System Data ***

   System ID            = 'ITDS CONVERTER: GEF_IGES'
   Preprocessor version = '1.0'
   Specification version = 6 (IGES 4.0)

*** Precision levels ***
   Integer bits =    32
   Floating point   -  Exponent =    38  Mantissa =     6
   Double precision - Exponent =   308  Mantissa =    15

*** Global Model Data ***

   Model scale          = 1.0000E+00
   Unit flag            = 1
```

```
      Units                    =   'IN'
      Line weights             =   1
      Maximum line thickness   =   3.937490E-03
      Minimum line thickness   =   3.937490E-03
CAUTION 2317: Maximum line thickness equal to minimum thickness.
      Granularity              =   1.000000E-03
      Maximum coordinate       =   4.168750E+00
```

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

```
  Blank status: Visible                   834
                Blanked                     0

  Independence: Independent               830
                Physically Subordinate      1
                Logically Subordinate       3
                Totally Subordinate         0

  Entity use:   Geometry                  830
                Annotation                  4
                Definition                  0
                Other                       0
                Logical/Positional          0
                2D parametric               0
                Not Specified               0

  Hierarchy:    Structure DE applies        0
                Subordinate DE applies    834
                Hierarchy property applies  0
                Not Specified               0
```

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
100	0	0	1	Circular arc
104	1	0	108	Conic arc - ellipse
106	63	0	1	Simple closed planar curve
110	0	0	421	Line
112	0	0	189	Parametric spline curve
124	0	0	108	Transformation matrix
212	0	0	1	General note
230	0	0	1	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing

406	16	0	1	Property - Drawing size
406	18	0	1	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	834

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled   834

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
1	-	108	1	-	415	189	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	1	-	-	Phantom
-	-	-	-	-	5	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116	118	120	122	124	125	126	128	
-	-	-	-	108	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	834	(0.0039)

*** Colors Used in Data ***

Defaulted	118
Black	715
White	1

```
******************************
******  ENTITY ANALYSIS  ******
******************************
```

*** Entity type: 100

*** Entity type: 104

WARNING 2265: Start point off conic by 1.336260E-03 at D   969.
WARNING 2039: End point off conic by 1.336260E-03 at D   969.
                  <<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

 *** Entity type: 106

*** Entity type: 110

 --   421 lines averaging 1.199761E-01 units --

*** Entity type: 112

WARNING 2238: Polynomial segment (4) at D   1343 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1487 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1513 is degenerate.
WARNING 2238: Polynomial segment (0) at D   1537 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1541 is degenerate.
WARNING 2238: Polynomial segment (0) at D   1645 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1647 is degenerate.

 *** Entity type: 124

108 transformation matrices, 108 non-zero translations.
NOTE   2341: 108 matrices contain translation information.

 *** Entity type: 212

1 text strings in data file.
Average text aspect ratio in file is 0.9873866.
Minimum text aspect ratio in file is 0.9873866.
Maximum text aspect ratio in file is 0.9873866.

FONTS USED IN FILE

FONT   COUNT   NAME

    1   1   Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D   5 contains 1 views.
Drawing at D   5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D   1 is 1.000000E+00.
Orthographic View entity at D   1 has 0 clipping planes specified.
   XMIN = Not Set   XMAX = Not Set
   YMIN = Not Set   YMAX = Not Set
   ZMIN = Not Set   ZMAX = Not Set

*** Message Summary ***

2015: 14 Mathematically incorrect definitions.
2018: 1 Problems with line weight/width display information.

*** Error Summary ***

     0 fatal errors
     0 severe errors
     0 errors
    14 warnings
     1 cautions
     0 nitpicks
     1 notes

*** End of Analysis of /novell/9349/d001q005.igs ***

10.2.2   Parser Log - AutoCAD R12

```
Title: IGESIN Journal (v5.1 Nov 05 1992)
===============================================================================
File: I:/9349/D001Q005.xli
Date: Mon, May 17, 1993
Time: 16:04:28
===============================================================================

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N:   117-10075750
Translating from IGES file:       I:/9349/D001Q005.IGS
           to AutoCAD Drawing:    I:\9349\D001Q005.dwg


===============================================================================

Options obtained from:   default settings
Curves Approximated to Tolerance of           0.01
Surfaces Approximated to Tolerance of         0.01

Text Font/Style mapping:
IGES Text font        Style Name        ACAD Font
         0                 SYMBOL0          iges0
         1                 STANDARD           txt
         2                    LEROY           txt
         3                   FUTURA           txt
         6                   COMP80           txt
        12                  GOTHICE        gothice
        13                  GOTHICI        gothici
        14                   ROMANS         romans
        17                   ROMANT         romant
        18                   ROMAND         romand
        19                      OCR            txt
      1001                  SYMBOL1       iges1001
      1002                  SYMBOL2       iges1002
      1003                  SYMBOL3       iges1003
      2001                    KANJI        bigfont

IGES Linefont/AutoCAD Linetype mapping
IGES Line Font        AutoCAD linetype        Shape file
         0                 BYLAYER
         1              CONTINUOUS
         2                  DASHED              acad.lin
         3                 PHANTOM              acad.lin
         4                  CENTER              acad.lin
```

5   DOT   acad.lin

==

Parse phase

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 853, TF 100:0) Entity's radii are not equal. Start point radius:
2.8098244e-003. Terminate point radius: 2.9871534e-003.

Action taken: Start point moved 8.8664518e-005 units from -2.5998840e+000,
2.5412147e+000 to -2.5999726e+000, 2.5412116e+000.   Terminate point moved
8.8664518e-005 units from -2.5972404e+000, 2.5383308e+000 to -2.5972356e+000,
2.5384193e+000.

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 855, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_BAD_CONTINUITY_112) ***
(DE 1287, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_BAD_CONTINUITY_112) ***
(DE 1331, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

==
Start Section:

CONFORMANCE:
  MIL-D-28000 Amendment1, 20 December 1988
  Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:
  0101A.gef.igs

Global Section:

```
Parameter Delimiter:        ,
Record Delimiter:           ;
Sending Product ID:         0101A.gef.igs
File Name:                  0101A.gef.igs
System ID:                  ITDS CONVERTER: GEF_IGES
Preprocessor Version:       1.0
Size of Integer:            32
Sgl. Precision Mag:         38
Sgl. Precision Sig:         6
Dbl. Precision Mag:         308
Dbl. Precision Sig:         15
Receiving Product ID:       0101A.gef.igs
Model Space Scale:          1.000000
Unit Flag:                  1
Unit String:                IN
# of Line Weights:          1
Maximum Line Width:         0.003937
Creation Date:              02/18/93 13:05:11
Minimum Resolution:         0.001000
Maximum Coordinate:         4.168750
Author:                     NORTHROP B2 ITDS CTB
Organization:
IGES Version Number:        6
Drafting Standard:          0
```

Entity Summary:

Type	Form	Description	Count
100	0	Circular Arc	1
104	1	Ellipse	108
106	63	Simple Closed Planar Curve	1
110	0	Line	421
112	0	Parametric Spline Curve	189
124	0	Transformation Matrix	108
212	0	General Note (Simple)	1
230	0	Section Area (Standard Fill)	1
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	1
410	0	View	1
		Total	834

Translation phase

Drawing Entity (404 Form 0) at DE 5, with
   name = ,
   size = 3.937500, 3.150000,
   units = IN,
was processed in the AutoCAD drawing file: I:\9349\D001Q005.dwg

*** Warning (ACAD_NEW_VIEW_VOLUME_GENERATED) ***
(DE: 1 TF: 410:0)
A new view volume has been generated for the view with:
 XMIN (-4.497428), XMAX (0.222914),
 YMIN (0.675154), YMAX (4.418330),
 ZMIN (-0.470488), ZMAX (0.470488).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
100	0	Circular Arc	1	1	0
104	1	Ellipse	108	108	0
106	63	Simple Closed Planar Curve	2	2	0
110	0	Line	421	421	0
112	0	Parametric Spline Curve	189	189	0
212	0	General Note (Simple)	1	1	0
230	0	Section Area (Standard Fill)	1	1	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	1	1	0
Totals			726	726	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	1
Total			1

AutoCAD Entity Summary

Entity	Created	Errors
LINE	509	0
TEXT	1	0
ARC	1	0

INSERT   1   0
POLYLINE   211   0
BLOCK   1   0

 Totals   =======   ======
                724   0
==
Error Summary:

The following message was issued 1 time(s)
Entity's radii are not equal. Start point radius: %.7e. Terminate point
radius: %.7e.

The following message was issued 108 time(s)
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 108 time(s)
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 162 time(s)
Entity's Degree of Continuity, %d, is incorrectly specified. Degree of
Continuity calculated to be %d.

The following message was issued 106 time(s)
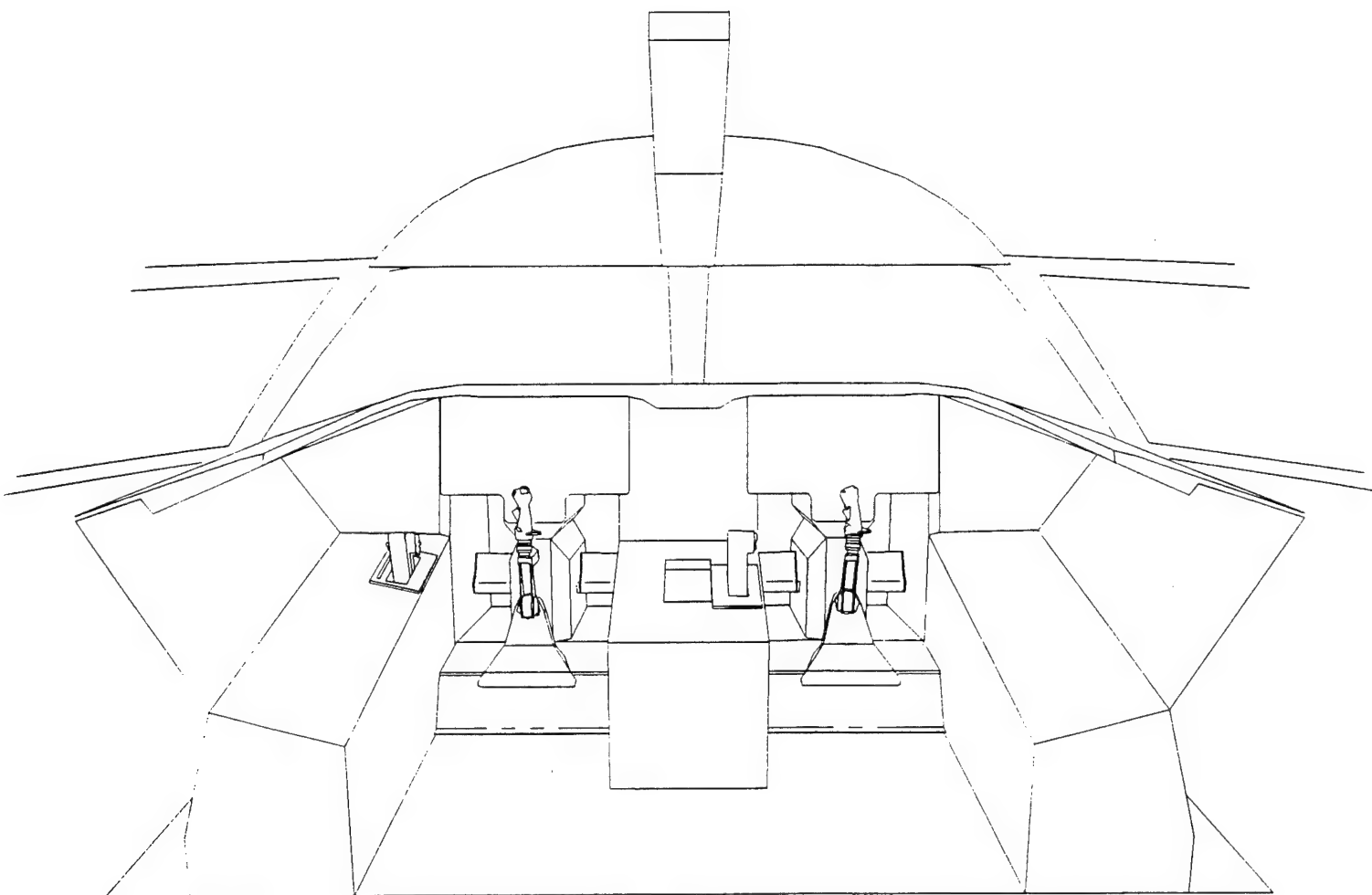Entity has a column which is not a unit vector.

The following message was issued 1 time(s)
A new view volume has been generated for the view with:
 XMIN (%lf), XMAX (%lf),
 YMIN (%lf), YMAX (%lf),
 ZMIN (%lf), ZMAX (%lf).

Status: 0
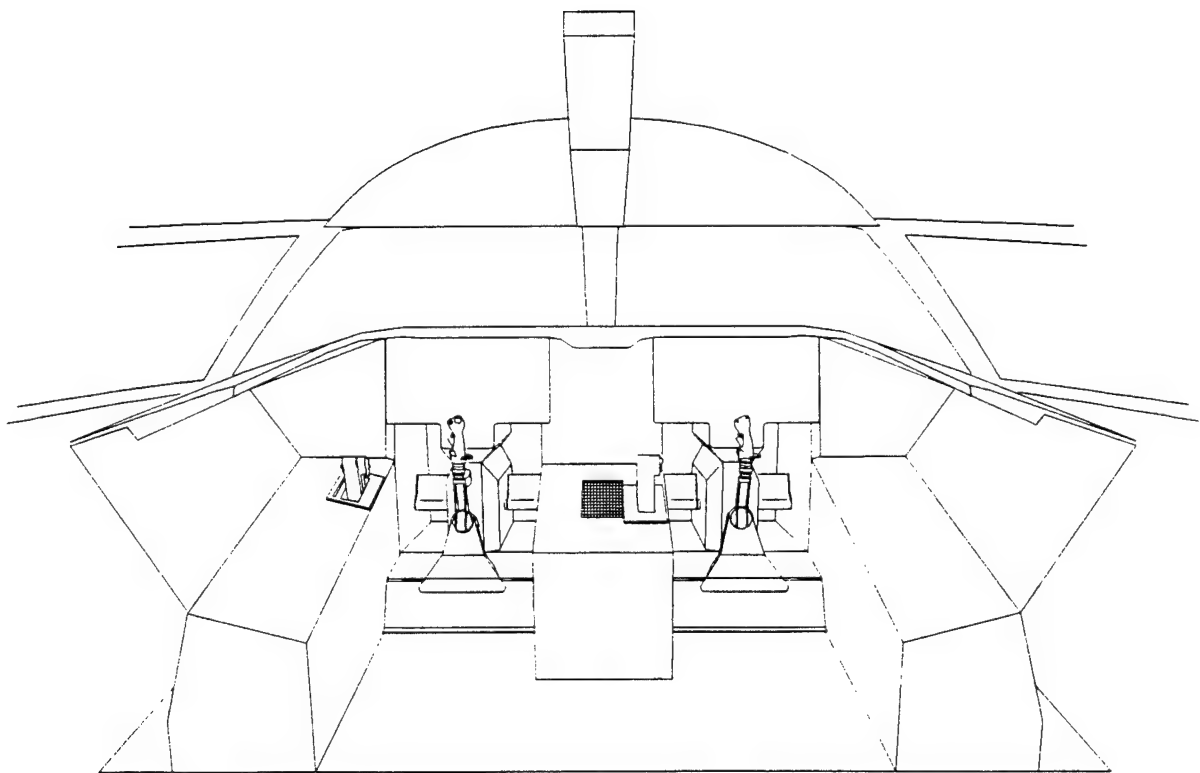Warning: 486
Error: 0
Fatal: 0

Elapsed Time:

Processor: 00:00:43
Clock: 00:00:44

10.2.3 Output AutoCAD R12

B2AJG2112-0101A

10.2.4   Output IGESView

B2A IG2112-0101A

10.3   File D001Q006

10.3.1   Parser/Verifier Log

```
          *** IGES DATA FILE ANALYSIS ***
          ***         MARCH 1992         ***
          ***    IGES Data Analysis     ***
          ***        (708) 449-3430      ***

 Input file is /novell/9349/d001q006.igs

 Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

 Today is May 17, 1993  1:30 PM

*** File and Product Name Information ***

   File name from sender     = '0109C.gef.igs'
   File creation Date.Time    = '930218.130525'
   Model change Date.Time    = ''
   Author                    = 'NORTHROP B2 ITDS CTB'
   Department                = ''
   Product name from sender = '0109C.gef.igs'
   Destination product name = '0109C.gef.igs'

*** Parameter Delimiters ***

   Delimiter  = ','
   Terminator = ';'

*** Originating System Data ***

   System ID               = 'ITDS CONVERTER: GEF_IGES'
   Preprocessor version    = '1.0'
   Specification version = 6 (IGES 4.0)

*** Precision levels ***
   Integer bits =     32
   Floating point  -  Exponent =     38  Mantissa =      6
   Double precision - Exponent =    308  Mantissa =     15

*** Global Model Data ***

   Model scale              =  1.0000E+00
   Unit flag                =  1
```

```
    Units                 =  'IN'
    Line weights          =  1
    Maximum line thickness =  6.300000E-03
    Minimum line thickness =  6.300000E-03
CAUTION 2317: Maximum line thickness equal to minimum thickness.
    Granularity           =  1.000000E-03
    Maximum coordinate    =  7.243750E+00
```

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1432
	Blanked	0
Independence:	Independent	1422
	Physically Subordinate	6
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1417
	Annotation	15
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1432
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
100	0	0	11	Circular arc
104	1	0	266	Conic arc - ellipse
106	63	0	6	Simple closed planar curve
110	0	0	676	Line
112	0	0	189	Parametric spline curve
124	0	0	266	Transformation matrix
212	0	0	7	General note
230	0	0	6	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing

406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	1432

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled   1432

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	252	6	-	600	189	-	Solid
-	-	1	-	-	19	-	-	Dashed
-	-	13	-	-	50	-	-	Phantom
-	-	-	-	-	7	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116	118	120	122	124	125	126	128	
-	-	-	-	266	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	1432	(0.0063)

*** Colors Used in Data ***

Defaulted	647
Black	778
White	7

```
*******************************
******  ENTITY ANALYSIS  ******
*******************************
```

*** Entity type: 100

*** Entity type: 104

WARNING 2265: Start point off conic by 4.023317E-03 at D   953.
WARNING 2039: End point off conic by 4.023317E-03 at D   953.

<<<< PART OF LOG FILE REMOVED HERE >>>>>

WARNING 2265: Messages regarding invalid start point suppressed.
WARNING 2039: Messages regarding conic end points suppressed.

*** Entity type: 106

*** Entity type: 110

  --   676 lines averaging 1.383460E-01 units --

*** Entity type: 112

WARNING 2238: Polynomial segment (0) at D   1345 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1423 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1561 is degenerate.
WARNING 2238: Polynomial segment (0) at D   1563 is degenerate.
WARNING 2238: Polynomial segment (0) at D   1645 is degenerate.

*** Entity type: 124

266 transformation matrices, 266 non-zero translations.
NOTE   2341: 266 matrices contain translation information.

*** Entity type: 212

    7 text strings in data file.
    Average text aspect ratio in file is 0.9608803.
    Minimum text aspect ratio in file is 0.8928572.
    Maximum text aspect ratio in file is 0.9923470.

    FONTS USED IN FILE

    FONT   COUNT   NAME

      1   7   Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D   5 contains 1 views.
Drawing at D   5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

  Scale of view at D   1 is 1.000000E+00.
Orthographic View entity at D   1 has 0 clipping planes specified.
    XMIN = Not Set   XMAX = Not Set
    YMIN = Not Set   YMAX = Not Set
    ZMIN = Not Set   ZMAX = Not Set

*** Message Summary ***

2015: 39 Mathematically incorrect definitions.
2018: 1 Problems with line weight/width display information.

*** Error Summary ***

    0 fatal errors
    0 severe errors
    0 errors
   39 warnings
    1 cautions
    0 nitpicks
    1 notes

*** End of Analysis of /novell/9349/d001q006.igs ***

10.3.2 Parser Log - AutoCAD R12

```
Title: IGESIN Journal (v5.1 Nov 05 1992)
==========================================================================
File: I:/9349/D001Q006.xli
Date: Mon, May 17, 1993
Time: 16:05:19
==========================================================================


EVALUATION VERSION -- NOT FOR RESALE

Translator S/N:   117-10075750
Translating from IGES file:      I:/9349/D001Q006.IGS
          to AutoCAD Drawing:    I:\9349\D001Q006.dwg


==========================================================================

Options obtained from:  default settings
Curves Approximated to Tolerance of          0.01
Surfaces Approximated to Tolerance of        0.01

Text Font/Style mapping:
```

IGES Text font	Style Name	ACAD Font
0	SYMBOL0	iges0
1	STANDARD	txt
2	LEROY	txt
3	FUTURA	txt
6	COMP80	txt
12	GOTHICE	gothice
13	GOTHICI	gothici
14	ROMANS	romans
17	ROMANT	romant
18	ROMAND	romand
19	OCR	txt
1001	SYMBOL1	iges1001
1002	SYMBOL2	iges1002
1003	SYMBOL3	iges1003
2001	KANJI	bigfont

```
IGES Linefont/AutoCAD Linetype mapping
```

IGES Line Font	AutoCAD linetype	Shape file
0	BYLAYER	
1	CONTINUOUS	
2	DASHED	acad.lin
3	PHANTOM	acad.lin

| 4 | CENTER | acad.lin |
| 5 | DOT | acad.lin |

==

Parse phase

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 893, TF 100:0) Entity's radii are not equal. Start point radius:
2.8024447e-003. Terminate point radius: 3.3702065e-003.

Action taken: Start point moved 2.8388087e-004 units from -2.5695066e+000,
5.6756716e+000 to -2.5697890e+000, 5.6756419e+000.   Terminate point moved
2.8388087e-004 units from -2.5668151e+000, 5.6725955e+000 to -2.5668071e+000,
5.6728793e+000.

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 895, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_BAD_CONTINUITY_112) ***
(DE 1327, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 2213, TF 100:0) Entity's radii are not equal. Start point radius:
1.4855999e-002. Terminate point radius: 1.5315735e-002.

Action taken: Start point moved 2.2986790e-004 units from -1.9915709e+000,
3.8937991e+000 to -1.9913455e+000, 3.8938438e+000.   Terminate point moved
2.2986790e-004 units from -2.0204101e+000, 3.8853395e+000 to -2.0201959e+000,
3.8854231e+000.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 2231, TF 100:0) Entity's radii are not equal. Start point radius:
1.4816048e-002. Terminate point radius: 1.5270259e-002.

Action taken: Start point moved 2.2710550e-004 units from -1.5851316e+000,

3.9949281e+000 to -1.5849080e+000, 3.9949678e+000.   Terminate point moved
2.2710550e-004 units from -1.6139707e+000, 3.9868531e+000 to -1.6137588e+000,
3.9869347e+000.

==
Start Section:

CONFORMANCE:
  MIL-D-28000 Amendment1, 20 December 1988
  Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:
  0109C.gef.igs

Global Section:

```
Parameter Delimiter:        ,
Record Delimiter:           ;
Sending Product ID:         0109C.gef.igs
File Name:                  0109C.gef.igs
System ID:                  ITDS CONVERTER: GEF_IGES
Preprocessor Version:       1.0
Size of Integer:            32
Sgl. Precision Mag:         38
Sgl. Precision Sig:         6
Dbl. Precision Mag:         308
Dbl. Precision Sig:         15
Receiving Product ID:       0109C.gef.igs
Model Space Scale:          1.000000
Unit Flag:                  1
Unit String:                IN
# of Line Weights:          1
Maximum Line Width:         0.006300
Creation Date:              02/18/93 1C:05:25
Minimum Resolution:         0.001000
Maximum Coordinate:         7.243750
Author:                     NORTHROP B2 ITDS CTB
Organization:
IGES Version Number:        6
Drafting Standard:          0
```

Entity Summary:

Type	Form	Description	Count
100	0	Circular Arc	11
104	1	Ellipse	266

106	63	Simple Closed Planar Curve	6
110	0	Line	676
112	0	Parametric Spline Curve	189
124	0	Transformation Matrix	266
212	0	General Note (Simple)	7
230	0	Section Area (Standard Fill)	6
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	2
410	0	View	1

	Total	1432

===

Translation phase

Drawing Entity (404 Form 0) at DE 5, with
   name = ,
   size = 3.937500, 6.300000,
   units = IN,
was processed in the AutoCAD drawing file: I:\9349\D001Q006.dwg

*** Warning (ACAD_NEW_VIEW_VOLUME_GENERATED) ***
(DE: 1 TF: 410:0)
A new view volume has been generated for the view with:
 XMIN (-4.641312), XMAX (0.395926),
 YMIN (0.452713), YMAX (7.727481),
 ZMIN (-0.692911), ZMAX (0.692911).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
100	0	Circular Arc	11	11	0
104	1	Ellipse	266	266	0
106	63	Simple Closed Planar Curve	7	7	0
110	0	Line	676	676	0
112	0	Parametric Spline Curve	189	189	0
212	0	General Note (Simple)	7	7	0
230	0	Section Area (Standard Fill)	6	6	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	1	1	0
Totals			1165	1165	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
406	18	Property (Int-character Spacing)	2
			=====
Total			2

AutoCAD Entity Summary

Entity	Created	Errors
LINE	857	0
TEXT	7	0
ARC	11	0
SOLID	5	0
INSERT	1	0
POLYLINE	288	0
BLOCK	1	0
Totals	=======	======
	1170	0

==
Error Summary:

The following message was issued 11 time(s)
Entity's radii are not equal. Start point radius: %.7e. Terminate point
radius: %.7e.

The following message was issued 265 time(s)
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 266 time(s)
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 161 time(s)
Entity's Degree of Continuity, %d, is incorrectly specified. Degree of
Continuity calculated to be %d.

The following message was issued 261 time(s)
Entity has a column which is not a unit vector.

The following message was issued 1 time(s)
A new view volume has been generated for the view with:
 XMIN (%lf), XMAX (%lf),
 YMIN (%lf), YMAX (%lf),
 ZMIN (%lf), ZMAX (%lf).

Status: 0
Warning: 965
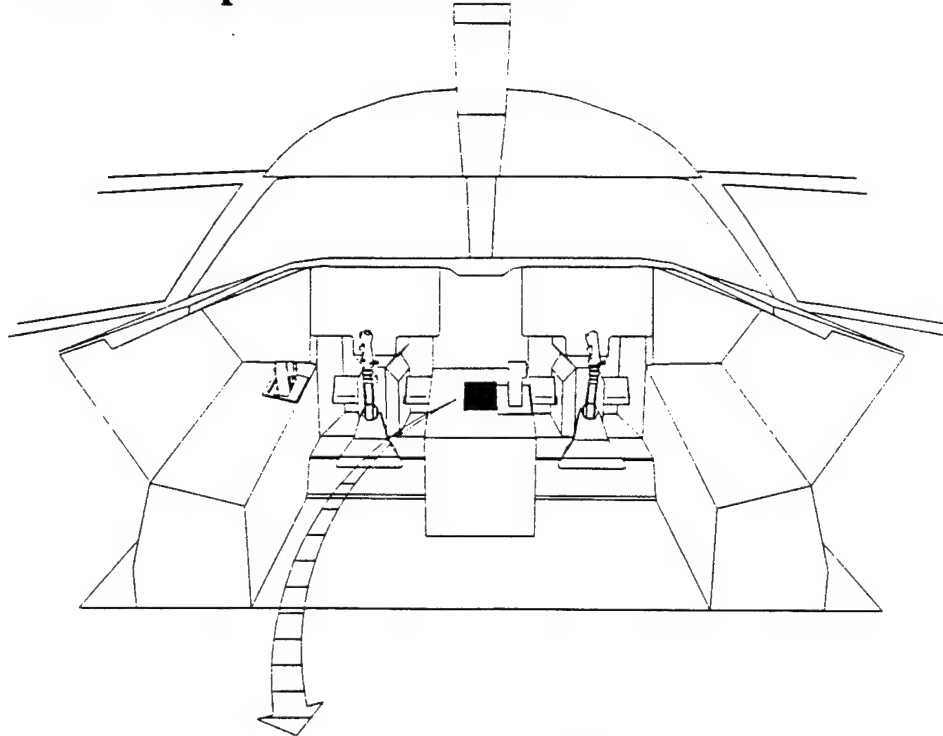Error: 0
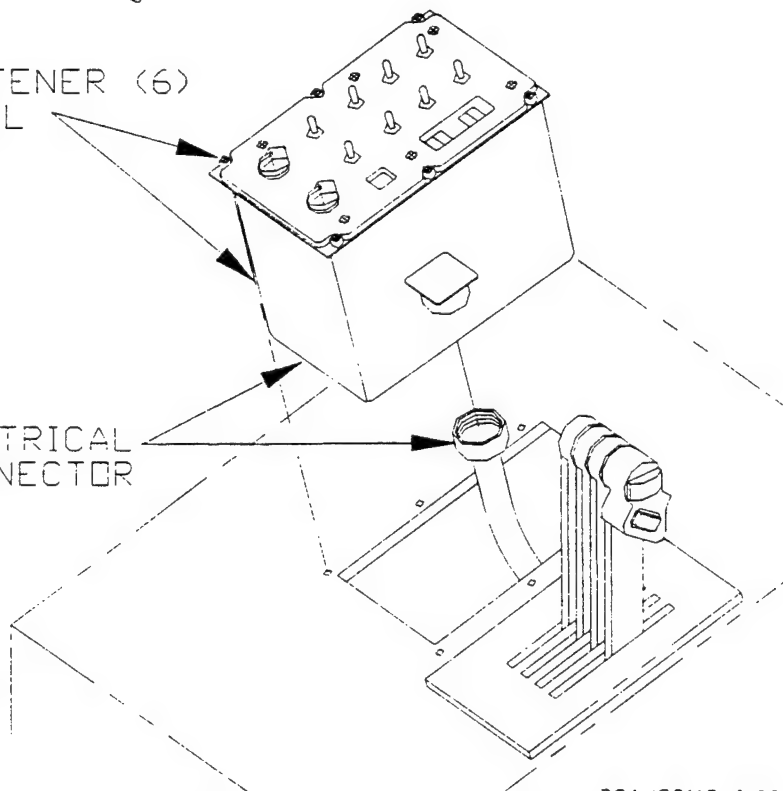Fatal: 0

Elapsed Time:

Processor: 00:01:03
Clock: 00:01:04

10.3.3   Output AutoCAD R12

2 FASTENER (6)
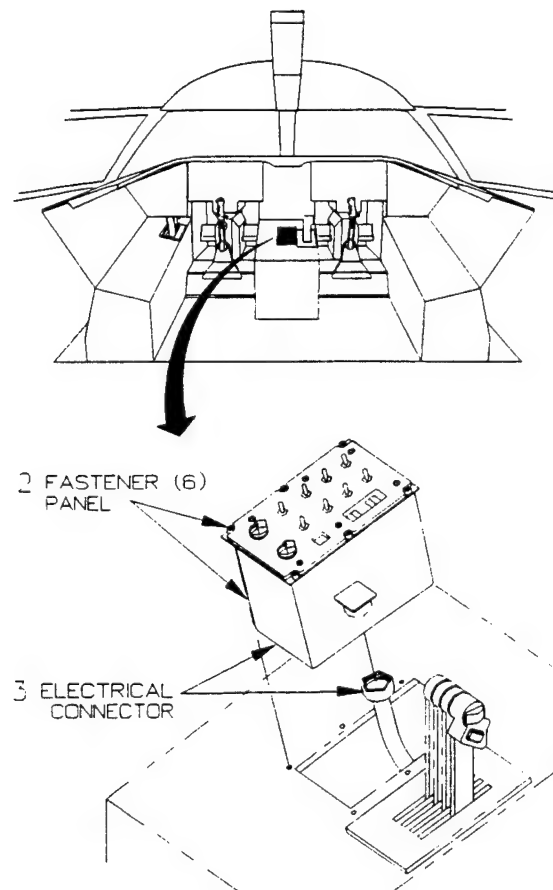   PANEL

3 ELECTRICAL
   CONNECTOR

32AJG2112-0109C

10.3.4 Output IGESView

2 FASTENER (6)
PANEL

3 ELECTRICAL
CONNECTOR

10.4   File D001Q007

10.4.1   Parser/Verifier Log

```
        ***  IGES DATA FILE ANALYSIS  ***
        ***         MARCH 1992         ***
        ***    IGES Data Analysis      ***
        ***        (708) 449-3430      ***

 Input file is /novell/9349/d001q007.igs

 Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

 Today is May 17, 1993  1:31 PM

*** File and Product Name Information ***

   File name from sender   = '0110B.gef.igs'
   File creation Date.Time  = '930218.130543'
   Model change Date.Time   = ''
   Author                   = 'NORTHROP B2 ITDS CTB'
   Department               = ''
   Product name from sender = '0110B.gef.igs'
   Destination product name = '0110B.gef.igs'

*** Parameter Delimiters ***

   Delimiter  = ','
   Terminator = ';'

*** Originating System Data ***

   System ID            = 'ITDS CONVERTER: GEF_IGES'
   Preprocessor version = '1.0'
   Specification version = 6 (IGES 4.0)

*** Precision levels ***
   Integer bits =    32
   Floating point  -  Exponent =    38  Mantissa =     6
   Double precision - Exponent =   308  Mantissa =    15

*** Global Model Data ***

   Model scale          =  1.0000E+00
   Unit flag            =  1
```

```
Units                    =  'IN'
Line weights             =  1
Maximum line thickness   =  6.300000E-03
Minimum line thickness   =  6.300000E-03
CAUTION 2317: Maximum line thickness equal to minimum thickness.
Granularity              =  1.000000E-03
Maximum coordinate       =  7.243750E+00
```

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1433
	Blanked	0
Independence:	Independent	1423
	Physically Subordinate	6
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1417
	Annotation	16
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1433
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
100	0	0	11	Circular arc
104	1	0	266	Conic arc - ellipse
106	63	0	6	Simple closed planar curve
110	0	0	676	Line
112	0	0	189	Parametric spline curve
124	0	0	266	Transformation matrix
212	0	0	8	General note
230	0	0	6	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing

406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level Count
    0   1433

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled   1433

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	252	6	-	600	189	-	Solid
-	-	1	-	-	19	-	-	Dashed
-	-	13	-	-	50	-	-	Phantom
-	-	-	-	-	7	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116	118	120	122	124	125	126	128	
-	-	-	-	266	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

     Weight   Count   Width

  Defaulted   1433   (0.0063)

*** Colors Used in Data ***

  Defaulted   647
     Black   778
     White   8

****
****** ENTITY ANALYSIS ******
****

*** Entity type: 100

*** Entity type: 104

WARNING 2265: Start point off conic by 4.023317E-03 at D   955.
WARNING 2039: End point off conic by 4.023317E-03 at D   955.

              <<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

WARNING 2265: Messages regarding invalid start point suppressed.
WARNING 2039: Messages regarding conic end points suppressed.

 *** Entity type: 106

 *** Entity type: 110

   --   676 lines averaging 1.380248E-01 units --

*** Entity type: 112

WARNING 2238: Polynomial segment (0) at D   1351 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1421 is degenerate.
WARNING 2238: Polynomial segment (0) at D   1467 is degenerate.
WARNING 2238: Polynomial segment (1) at D   1567 is degenerate.
WARNING 2238: Polynomial segment (0) at D   1627 is degenerate.

 *** Entity type: 124

266 transformation matrices, 266 non-zero translations.
NOTE   2341: 266 matrices contain translation information.

*** Entity type: 212

    8 text strings in data file.
    Average text aspect ratio in file is 0.9635382.
    Minimum text aspect ratio in file is 0.8928572.
    Maximum text aspect ratio in file is 0.9923470.

    FONTS USED IN FILE

    FONT   COUNT   NAME

      1   8   Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D   5 contains 1 views.
Drawing at D   5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

  Scale of view at D   1 is 1.000000E+00.
Orthographic View entity at D   1 has 0 clipping planes specified.
    XMIN = Not Set   XMAX = Not Set
    YMIN = Not Set   YMAX = Not Set
    ZMIN = Not Set   ZMAX = Not Set

*** Message Summary ***

2015: 39 Mathematically incorrect definitions.
2018: 1 Problems with line weight/width display information.

*** Error Summary ***

    0 fatal errors
    0 severe errors
    0 errors
   39 warnings
    1 cautions
    0 nitpicks
    1 notes

*** End of Analysis of /novell/9349/d001q007.igs ***

10.4.2   Parser Log - AutoCAD R12

```
Title: IGESIN Journal (v5.1 Nov 05 1992)
===============================================================================
File: I:/9349/D001Q007.xli
Date: Mon, May 17, 1993
Time: 16:06:29
===============================================================================

EVALUATION VERSION -- NOT FOR RESALE

Translator S/N:   117-10075750
Translating from IGES file:       I:/9349/D001Q007.IGS
          to AutoCAD Drawing:     I:\9349\D001Q007.dwg


===============================================================================

Options obtained from:  default settings
Curves Approximated to Tolerance of          0.01
Surfaces Approximated to Tolerance of        0.01
Text Font/Style mapping:
IGES Text font        Style Name      ACAD Font
          0             SYMBOL0         iges0
          1             STANDARD          txt
          2               LEROY           txt
          3              FUTURA           txt
          6              COMP80           txt
         12             GOTHICE         gothice
         13             GOTHICI         gothici
         14              ROMANS          romans
         17              ROMANT          romant
         18              ROMAND          romand
         19                 OCR           txt
       1001             SYMBOL1        iges1001
       1002             SYMBOL2        iges1002
       1003             SYMBOL3        iges1003
       2001               KANJI         bigfont

IGES Linefont/AutoCAD Linetype mapping
IGES Line Font        AutoCAD linetype        Shape file
          0                BYLAYER
          1              CONTINUOUS
          2                DASHED              acad.lin
          3               PHANTOM              acad.lin
          4                CENTER              acad.lin
```

5   DOT   acad.lin

==

Parse phase

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 895, TF 100:0) Entity's radii are not equal. Start point radius:
2.8024447e-003. Terminate point radius: 3.3702065e-003.

Action taken: Start point moved 2.8388087e-004 units from -2.5695066e+000,
5.6756716e+000 to -2.5697890e+000, 5.6756419e+000.   Terminate point moved
2.8388087e-004 units from -2.5668151e+000, 5.6725955e+000 to -2.5668071e+000,
5.6728793e+000.

*** Warning (IEVM_BAD_VECTOR_124) ***
(DE 897, TF 124:0) Entity has a column which is not a unit vector.

Action taken: Unitized all vectors.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_BAD_CONTINUITY_112) ***
(DE 1329, TF 112:0) Entity's Degree of Continuity, 0, is incorrectly specified.
Degree of Continuity calculated to be 2.

Action taken: Degree of Continuity set to 2.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 2215, TF 100:0) Entity's radii are not equal. Start point radius:
7.4272813e-001. Terminate point radius: 7.4310435e-001.

Action taken: Start point moved 1.8810613e-004 units from -1.4974608e+000,
2.2745790e+000 to -1.4976433e+000, 2.2745335e+000.   Terminate point moved
1.8810613e-004 units from -1.3636473e+000, 1.9984925e+000 to -1.3634988e+000,
1.9986079e+000.

<<<<< *PART OF LOG FILE REMOVED HERE* >>>>>

*** Warning (IEVM_RADII_NOT_EQUAL_100) ***
(DE 2233, TF 100:0) Entity's radii are not equal. Start point radius:
1.5103175e-002. Terminate point radius: 1.5428022e-002.

Action taken: Start point moved 1.6242327e-004 units from -2.1480713e+000,
3.7761354e+000 to -2.1479120e+000, 3.7761672e+000.   Terminate point moved

1.6242327e-004 units from -2.1772947e+000, 3.7676759e+000 to -2.1771430e+000, 3.7677338e+000.

===
Start Section:

CONFORMANCE:
  MIL-D-28000 Amendment1, 20 December 1988
  Technical Illustration Class I Subset

ILLUSTRATION IDENTIFIER:
  0110B.gef.igs

Global Section:

Parameter Delimiter:	,
Record Delimiter:	;
Sending Product ID:	0110B.gef.igs
File Name:	0110B.gef.igs
System ID:	ITDS CONVERTER: GEF_IGES
Preprocessor Version:	1.0
Size of Integer:	32
Sgl. Precision Mag:	38
Sgl. Precision Sig:	6
Dbl. Precision Mag:	308
Dbl. Precision Sig:	15
Receiving Product ID:	0110B.gef.igs
Model Space Scale:	1.000000
Unit Flag:	1
Unit String:	IN
# of Line Weights:	1
Maximum Line Width:	0.006300
Creation Date:	02/18/93 13:05:43
Minimum Resolution:	0.001000
Maximum Coordinate:	7.243750
Author:	NORTHROP B2 ITDS CTB
Organization:	
IGES Version Number:	6
Drafting Standard:	0

Entity Summary:

Type	Form	Description	Count
100	0	Circular Arc	11
104	1	Ellipse	266
106	63	Simple Closed Planar Curve	6

110	0	Line	676
112	0	Parametric Spline Curve	189
124	0	Transformation Matrix	266
212	0	General Note (Simple)	8
230	0	Section Area (Standard Fill)	6
404	0	Drawing (form 0)	1
406	16	Property (Drawing Size)	1
406	18	Property (Int-character Spacing)	2
410	0	View	1

		Total	1433

Translation phase

Drawing Entity (404 Form 0) at DE 5, with
   name = ,
   size = 3.937500, 6.300000,
   units = IN,
was processed in the AutoCAD drawing file: I:\9349\D001Q007.dwg

*** Warning (ACAD_NEW_VIEW_VOLUME_GENERATED) ***
(DE: 1 TF: 410:0)
A new view volume has been generated for the view with:
 XMIN (-4.657909), XMAX (0.396758),
 YMIN (0.451881), YMAX (7.728314),
 ZMIN (-0.693743), ZMAX (0.693743).

IGES Entity Summary

Type	Form	Description	Count	Processed	Errors
100	0	Circular Arc	11	11	0
104	1	Ellipse	266	266	0
106	63	Simple Closed Planar Curve	7	7	0
110	0	Line	676	676	0
112	0	Parametric Spline Curve	189	189	0
212	0	General Note (Simple)	8	8	0
230	0	Section Area (Standard Fill)	6	6	0
404	0	Drawing (form 0)	1	1	0
406	16	Property (Drawing Size)	1	1	0
410	0	View	-	1	0
Totals			1166	1166	0

Unsupported IGES Entity Summary

Type	Form	Description	Count
======	======	==	=====
406	18	Property (Int-character Spacing)	2
			=====
Total			2

AutoCAD Entity Summary

Entity	Created	Errors
==========	=======	======
LINE	858	0
TEXT	8	0
ARC	11	0
SOLID	5	0
INSERT	1	0
POLYLINE	287	0
BLOCK	1	0
	=======	======
Totals	1171	0

===
Error Summary:

The following message was issued 11 time(s)
Entity's radii are not equal. Start point radius: %.7e. Terminate point
radius: %.7e.

The following message was issued 265 time(s)
Entity's start point not on the conic. Value found was %.7e, %.7e.

The following message was issued 265 time(s)
Entity's End Point not on the conic. Value found was %.7e, %.7e.

The following message was issued 161 time(s)
Entity's Degree of Continuity, %d, is incorrectly specified. Degree of
Continuity calculated to be %d.

The following message was issued 261 time(s)
Entity has a column which is not a unit vector.

The following message was issued 1 time(s)
A new view volume has been generated for the view with:
 XMIN (%lf), XMAX (%lf),
 YMIN (%lf), YMAX (%lf),
 ZMIN (%lf), ZMAX (%lf).

Status: 0

Warning: 964
Error: 0
Fatal: 0

Elapsed Time:

Processor: 00:01:03
Clock: 00:01:04

10.4.3 Output AutoCAD R12

4 PANEL
FASTENER (6)

3 PANEL
ELECTRICAL
CONNECTOR

B2AJG2112-0110B

10.4.4 Output IGESView

4 PANEL
FASTENER (6)

3 PANEL
ELECTRICAL
CONNECTOR
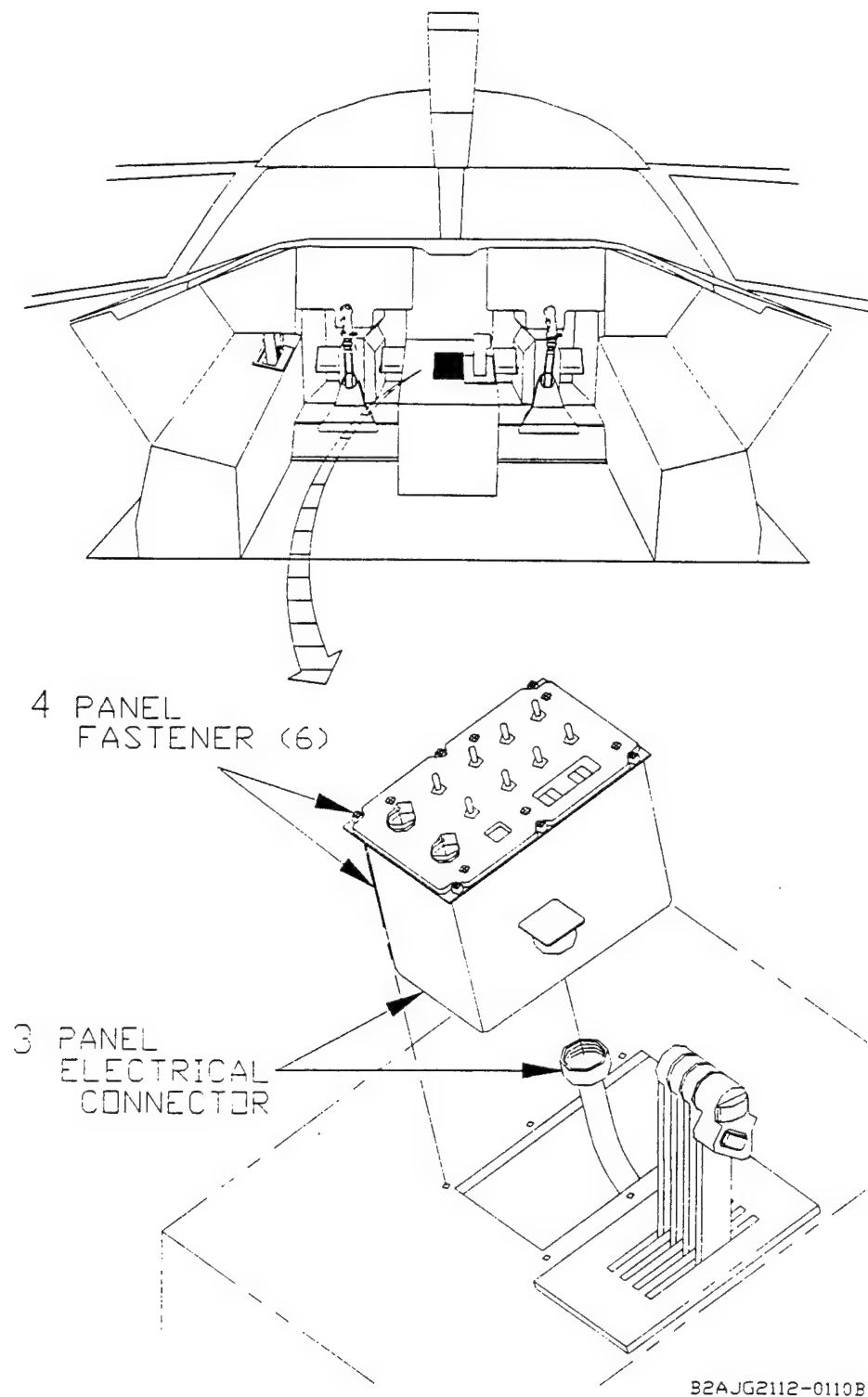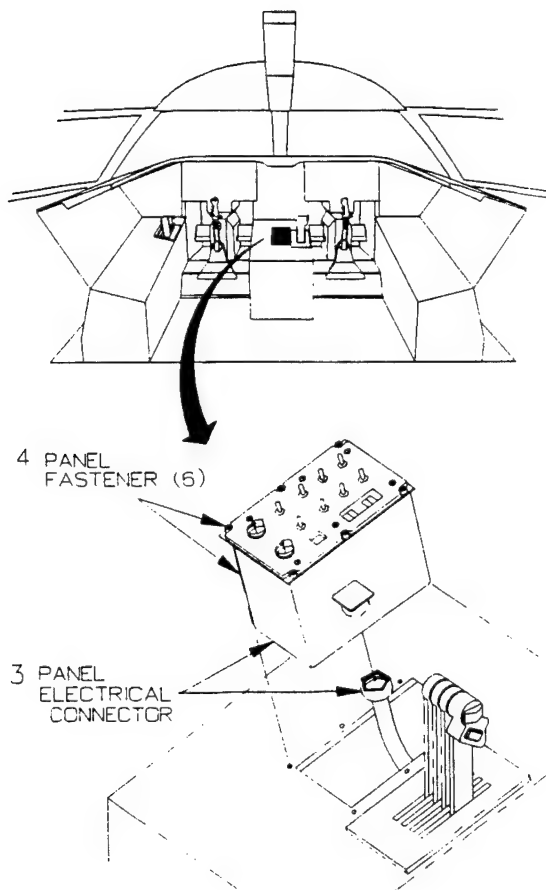
11.   Appendix C - Detailed SGML Analysis

11.1   ArbortText Parser Log

Reported errors are the same as reported by the Exoterica xvalid parser.

11.2   Exoterica Validator Parser

```
<!-- Entity has no name, system id or public id in formal file -->.
<!-- **Warning**:
   An element with mixed content should permit data characters ("#PCDATA")
   everywhere.
   The element being declared is "ENTRY".
   ((((#PCDATA|xref|change|emphasis|hcp|hci|ocp|
        ^^^^^^
-->
<!-- **Warning**:
   An element with mixed content should permit data characters ("#PCDATA")
   everywhere.
   The element being declared is "NOTICE".
   ((((#PCDATA|xref|change|emphasis|hcp|hci|ocp|
        ^^^^^^
-->
<!-- **Warning** in "9349.sgm", line 424:
   An element with mixed content should permit data characters ("#PCDATA")
   everywhere.
   The element being declared is "RESULT".
   <!ELEMENT result    - o (%text;,faultcode?)>
                                        /\
-->
<!-- **Warning** in "9349.sgm", line 1158:
   There is no element with an IDREF or IDREFS attribute value equal to a
   specified ID value.
   The unreferenced ID attribute value is "TOC".
-->
<!-- 4 warnings reported. -->
```

12. Appendix D - Detailed Raster Analysis

12.1 File D001R009

12.1.1 Output HiJaak for Windows

2 CONTROLLER
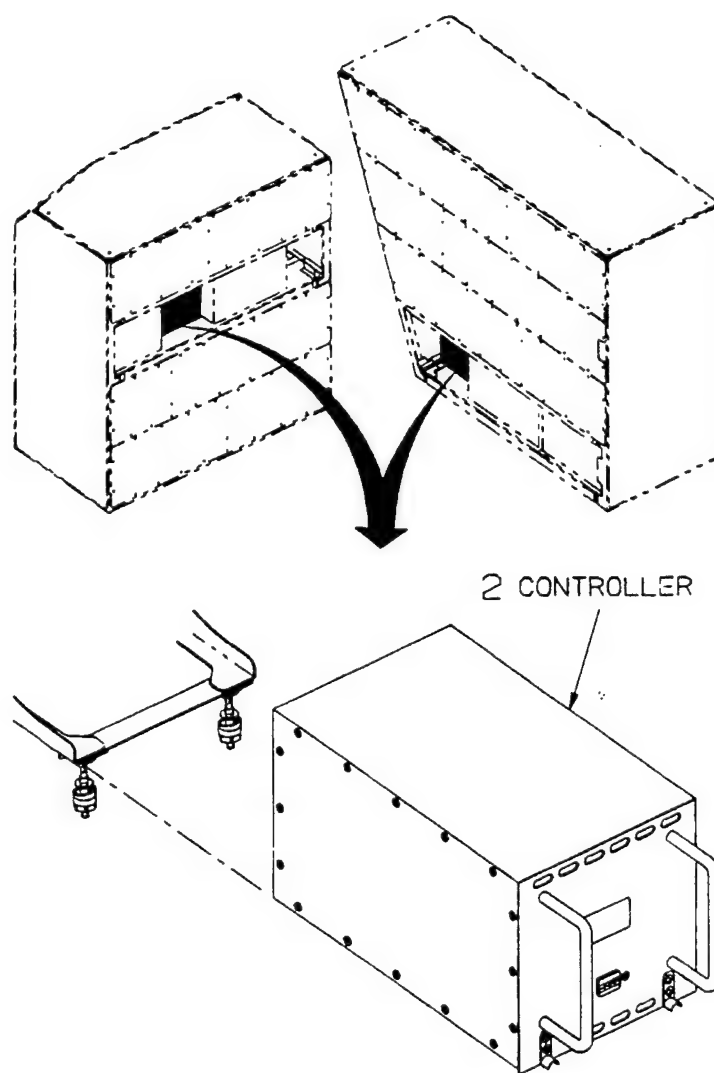
(TYPICAL)   B2AJ02111-01040

13. Appendix E - Detailed CGM Analysis

13.1 File D001C008

13.1.1 Parser Log MetaCheck

```
MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 05/17/93     Time:  12:04:43

Metafile Examined    : i:\9349\d001c008.cgm

Pictures Examined    : All
Elements Examined    : All
Bytes    Examined    : All

===================== Trace Report ======================

Tracing not selected.

============= CGM Conformance Violation Report ==============

No Errors Detected

========== CALS CGM Profile (MIL-D-28003) Report ===========

No profile discrepancies detected.

================ Conformance Summary Report ================

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 05/17/93     Time:  12:04:49

Name of CGM under test: i:\9349\d001c008.cgm
Encoding            : Binary

Pictures Examined    : All
Elements Examined    : All
Bytes    Examined    : All

BEGIN METAFILE string : "0103D.cgm"
METAFILE DESCRIPTION  : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1"
```

Picture 1 starts at octet offset 154; string contains: "Picture 1"

Private values encountered in CGM

Conformance Summary : This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

```
    1 Pictures Tested
 2192 Elements Tested
48616 Octets Tested
```

```
===================================
|    No Errors Were Detected    |
===================================
```

================= End of Conformance Report ===================

13.1.2   validcgm Log

```
Analysis for file c008.cgm using table table
ERROR: illegal in this state (2), std B
ERROR: required precursor (0, 4) not yet seen
(14.1, 0)          (3, 6, 2)       Clip Indicator OFF
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
(1, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
(1, 12) occurred 1 time
(1, 13) occurred 1 time
(2, 2) occurred 1 time
```

(2, 6) occurred 1 time
(2, 7) occurred 1 time
(3, 2) occurred 1 time
(3, 6) occurred 1 time
(3, 6) occurred illegally 1 time
(4, 1) occurred 624 times
(4, 4) occurred 5 times
(4, 7) occurred 5 times
(4, 15) occurred 20 times
(4, 17) occurred 165 times
(4, 18) occurred 565 times
(5, 2) occurred 99 times
(5, 3) occurred 99 times
(5, 4) occurred 99 times
(5, 10) occurred 1 time
(5, 12) occurred 3 times
(5, 13) occurred 3 times
(5, 14) occurred 1 time
(5, 15) occurred 4 times
(5, 16) occurred 4 times
(5, 17) occurred 1 time
(5, 18) occurred 1 time
(5, 22) occurred 95 times
(5, 23) occurred 2 times
(5, 27) occurred 93 times
(5, 28) occurred 93 times
(5, 29) occurred 93 times
(5, 30) occurred 95 times
(5, 34) occurred 1 time

13.1.3 Output Harvard Graphics

(TYPICAL)   5 CONTROLLER
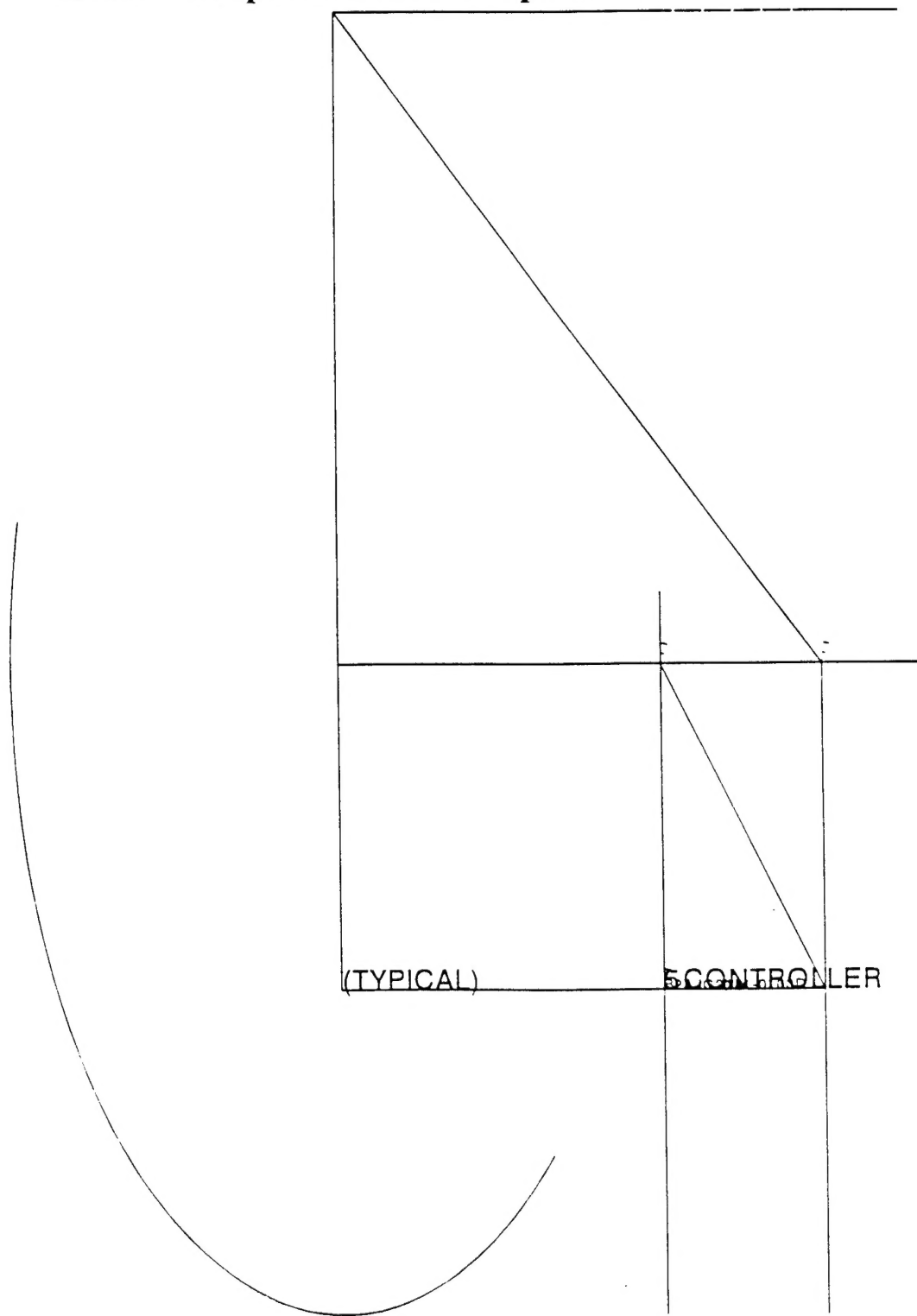
13.1.4   Output cgm2draw/IslandDraw